







Public Service Commission of Canada

Commission de la Fonction publique du Canada

## Research Scientist, Arctic Oceanographer

Fisheries and Oceans  
Ocean Science and Surveys  
Sidney, British Columbia

We require an experienced scientist to undertake research work concerning large-scale interactions between the sea ice cover and the underlying ocean, particularly on the southern Beaufort Sea. You will be expected to formulate and test hypotheses in the field of geophysical fluid dynamics as they relate to Arctic oceanography, and to design and supervise experiments concerning the motion of sea ice in the Canadian arctic.

You require graduation with a doctorate degree from a recognized university in physical oceanography, or a lesser degree with evidence of research experience and productivity equivalent to that of a doctorate degree. Substantial experience in oceanographic field work, in the analysis and interpretation of oceanographic data and in geophysical fluid dynamics is imperative. Knowledge of English is essential. You must be willing to participate in Canadian Arctic field operations for up to 3 months a year, and to undergo a medical examination. This appointment will be for a initial period of three years. We offer a salary ranging from \$26,841 to \$49,913 commensurate with your qualifications and experience.

Forward your résumé and/or application form, quoting reference number R-1-NR-SD-011-RES-2 (4011), to: Joan Girling (613) 593-5331, Public Service Commission of Canada, Ottawa, Ontario K1A 0M7.

**Closing Date:** 1 May 1984  
*Tout renseignement est disponible en français ou s'adressera à la personne susmentionnée.*

The Public Service of Canada is an equal opportunity employer.

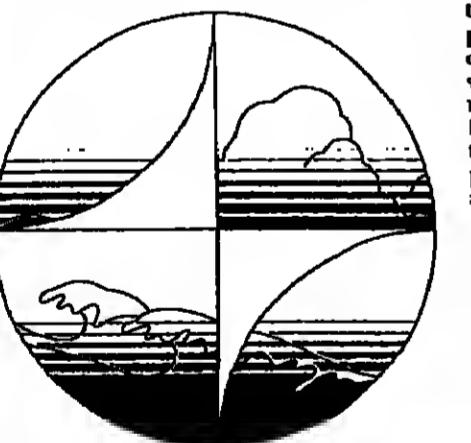
# Canada

**Postdoctoral Research Appointments UCLA:** Applications are invited for several anticipated appointments on the Research Staff at the Space Science Group of the Institute of Geophysics and Planetary Physics, University of California, Los Angeles. The successful applicant will be expected to devote a substantial fraction of time to research and project activities in one or more of the following areas: physics of the ionospheric/magnetosphere coupling, scientific investigations and data system development for the Geotail magnetometer, physics of the terrestrial magnetosphere, including analysis of ISEE and AMPTE data; studies of terrestrial EM waves; em-pulsing electric fields; and ionosphere.

Applicants should possess the Ph.D. degree in a relevant area of physics, astronomy, or planetary sciences. Some experience with space data analysis is required. A resume, copies of no more than three publications, and the names of three referees should be sent to: Dr. Margaret G. Kivelson, Dept. of Physics and the Planetary Physics, UCLA, Los Angeles, CA 90024.

The University of California is an equal opportunity employer.

## Meetings



**Joint Assembly IAMAP/IAPSO**  
Honolulu, Hawaii  
August 5-16, 1985  
First Circular  
March 1984

Sponsored by the International Association of Meteorology and Atmospheric Physics and the International Association for the Physical Sciences of the Ocean of the International Union of Geodesy and Geophysics.

Organized by the American Geophysical Union and the American Meteorological Society.

A Joint Assembly of IAMAP and IAPSO will be held in Honolulu, Hawaii, August 5-16, 1985.

### Venue

IAMAP and IAPSO last joined forces in an off-year joint scientific assembly in January 1974 in Melbourne, Australia. There was strong motivation to join forces again this time for 1985. The rapidly evolving World

Climate Research Programme includes major programs in both atmospheric and oceanic circulations and forcing. Large-scale atmospheric and oceanic processes, and their interactions, form the core of the WCRP. The Hawaii Joint Assembly will provide an opportunity to assess the scientific status of these processes so critical to climate, its variability, and its changes.

### Location

The site for the meeting in Honolulu was selected for the pleasant atmosphere and climate, the ease in accessibility from around the world.

### Accommodations

Living accommodations for participants will be in the same facility as the meeting, the Hilton Hawaiian Village. A block of 400 rooms which can accommodate one, two, three, or four persons have been booked at a very affordable rate of \$74. Room and board can therefore be had in an excellent hotel by doubling up. More elegant accommodations will also be available in the same hotel in the superior, deluxe, and in the Rainbow Tower at \$81, \$91, and \$101 single or double.

### Spouse Program

A program for accompanying persons will be arranged.

### Program

The program will consist of a series of joint symposia, frontier lectures, and individual symposia and scientific sessions of the associations.

### Themes for Symposia

**Joint Symposia (Joint association in parentheses)**

JSL The Southern Oscillation and El Nino (IAPSO)  
JS2 TCO in the Ocean-Atmosphere System (IAMAP)

JS3 Monitoring the Ocean Atmosphere System—New Techniques (IAMAP)  
JS4 Modeling the Global Ocean Atmosphere System (IAMAP)  
JS5 Heat Transfers, Heat and Water Budgets (IAMAP)  
JS6 Monsoon Circulations in Ocean and Atmosphere (IAMAP)

### IAPSO Symposia

J1 The World Ocean Circulation Experiment (WOCE)  
J2 Formation of the Main Ocean Thermocline  
J3 Low Frequency Dynamics in Mid-Latitudes

J4 Dynamics of the Mixed Layer  
J5 Variations of Sea Level  
J6 Physical and Chemical Oceanography [Poster Session]

### IAMAP Symposia

A1 Atmospheric Chemistry and Climate  
A2 Long-Range Transport of Trace Substances in Remote Regions

MAP1 Tracing Large-Scale Motions over the Oceans by Measurements of Atmospheric Electricity  
MAP15 Climate Effects of Nuclear War

MAP3 Clouds and Radiation [including the cirrus cloud problem and early results of ISCCP]  
MAP4 Nowcasting IIa

MAP5 Planetary Boundary Layer Physics [including small-scale process in the marine boundary layer]  
MAP6 Role of Air/Sea Interaction in Mesoscale Development

MAP7 Convective Processes and their Feedback onto the Larger-Scale Motion  
MAP8 Weather Forecasting in the Tropics

MAP9 Comparative Climatology of the Terrestrial Planets  
MAP10 Clouds in Planetary Atmospheres

MAP11 Remote Sensing over the Polar Regions  
MAP12 Polar-Midlatitude Interactions  
MAP13 Variability of Aerosol Optical Properties

### Visas

It is advisable that participants apply to a U.S. Consular Office for a visa at least 3 months before the date on which they plan to depart for the United States. Those wishing to visit Canada or Mexico as part of their trip should request multiple reentry visas. If an applicant has not received his visa 1 month before the beginning of the meeting, he is requested to cable to the U.S. National Committee for IUGG, c/o AGU, TWX 710-822-1800 or Telemail BWEAVER. Include the following data: name and address of applicant, passport number, and date and place of visa application. Appropriate efforts will be made immediately to resolve any problems and information about the status of the visa application will be communicated to the participant within a week.

Should a participant apply for a visa through a U.S. Consular Office located outside of his own country, it would be helpful for such information to be promptly conveyed to the U.S. National Committee for IUGG, c/o AGU, TWX 710-822-0200 or Telemail BWEAVER. The following data: name and address of applicant, passport number, and date and place of visa application. Appropriate efforts will be made immediately to resolve any problems and information about the status of the visa application will be communicated to the participant within a week.

On Monday afternoon in Room 2 an all-Union session will discuss Approaches to an International Geosphere-Biosphere Program, IGBP. The speakers in this session serve on a newly formed U.S. committee for an IGBP that is charged with defining a number of specific multi-disciplinary problems that appear soluble through an intrusive, international effort. Their presentations reflect individual views of questions and disciplines that might develop as candidates for IGBP emphasis.

On Tuesday morning in Room 2, four senior scientists involved in different aspects of space research will discuss their individual views of the current and likely future status of space research. The session should prove very timely in the light of recently announced NASA plans. It follows upon earlier all-Union sessions, such as Satellites and the Geosciences held at the 1983 Spring Meeting in Baltimore and should be of interest to many sections of AGU.

### History Papers

The Committee on the History of Geophysics is sponsoring four papers at the Spring Meeting, on Monday at 14:00 (SM-12A-01). Irwin Shapiro will recount technical and political aspects of Project Westford, an imaginative experiment conducted in 1963 to form an artificial ionosphere by placing millions of wire dipoles in earth orbit. History and Seismology will be featured on Wednesday at 8:15 (SM-1-01) in a paper by Otto Nuttli and Ronald Street who have analyzed contemporary reports and geological evidence of the 1811-1812 earthquakes centered in New Madrid. These earthquakes are among the largest known and occurred in the middle of continental plates. Using ancient oriental records of auroral occurrences, Mike Mendelsohn and colleagues have derived evidence for solar activity and the secular variation of the geomagnetic field. This evidence and analysis will be presented Monday at 15:18 (SM-12B-02). In

# GAP

## Separates

To Order: The order number can be found at the end of each abstract; use all digits when ordering. Only papers with order numbers are available from AGU. Cost: \$3.50 for the first article and \$1.00 for each additional article in the same order. Payment must accompany order. Deposit accounts available.

Send your order to:  
American Geophysical Union  
2000 Florida Avenue, N.W.  
Washington, D.C. 20009

## Aeronomy

6110 Absorption and Scattering of Radiation  
INTERACTION OF THE EARTH'S ATMOSPHERE  
WITH SOLAR-IR RADIATION: RESULTS AND THE  
THEORY AND PREDICTION OF THE MASSACHUSETTS  
AURORA INDEX

J. P. Apodaca and R. F. Stenflo (Institute of Space and Atmospheric Sciences, University of Waterloo, Waterloo, Ontario, N2L 3G1, Canada)

An efficient technique for including neutral atom scattering in the theory of the aurora index is presented.

The physical processes of neutral and turbulent convection, ion-pair, and electric fields

are discussed in the theory of the aurora index.

Computer simulations of the neutral and turbulent convection, ion-pair, and electric fields

are presented, and the results are compared

with the aurora index. The theory of the

aurora index is also presented in the

frequency range 100-1000 Hz.

Mod. Sci., Paper 480590

## Exploration Geophysics

6111 Seismic Methods  
METHOD OF INVERSION OF SEISMIC DATA: PRACTICAL  
AND THEORETICAL

J. N. Jones (NOAA/National Wave Propagation Laboratory, Boulder, Colorado 80304)

Groundwave mode-coupling coefficients at a discrete frequency are dependent on a dispersion curve defined after the appropriate numerical theory of diffraction edge-diffraction coefficient. The results agree with previous derivative theory.

Groundwave mode coupling is the mechanism

for groundwave mode coupling at a shoreline

and a coastal zone.

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